

# Professional PDP Display (PLASMA DISPLAY PANEL)

PPM50M7F/PPM63M7F

# **Owner's Instructions**

Before operating the unit, please read this manual thoroughly, and retain it for future reference.

ON-SCREEN MENUS
Picture In Picture (PIP)
Energy Saving
SRS TruSurround XT
DNIE Digital Natural Image engine

Register your product at www.samsung.com/global/register
Record your Model and Serial number here for future reference

<ul><li>Model</li></ul>	<ul> <li>Serial No.</li> </ul>	

### **User Instructions**

### Screen Image retention

Do not display a still image (such as on a video game or when hooking up a PC to this PDP Display) on the plasma PDP Display panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

### Height

The PDP Display can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height, so do not install and operate there.

### ♦ Heat on the top of the PDP Display

The top side of the product may be not after long periods of use as heat dissipates from the panel through the vent hole in the upper part of the product.

This is normal and does not indicate any defect or operation failure of the product.

However, children should be prevented from touching the upper part of the product.

### ◆ The product is making a 'cracking' noise.

A 'cracking' noise may occur when the product contracts or expands due to a change of surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

### Cell Defects

The PDP Display uses a panel consisting of 1,230,000(SD-level) to 3,150,000(HD-level) pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

### Avoid operating the PDP Display at temperatures below 5°C(41°F)

### ♦ A still image displayed too long may cause permanent damage to the PDP Panel.



Watching the PDP Display in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and center of the screen caused by the difference of light emission on the screen.

Playing a DVD or a game console may cause similar effect to the screen. Damage caused by the above effect are not covered by the Warranty.

### After image on the Screen.

Displaying still images from Video games and PC for longer than a certain period of time may produce partial afterimages.

To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images for a long time.

### Warranty

- Warranty does not cover any damage caused by image retention.
- Burn-in is not covered by the warranty.

### **♦** Installation

Be sure to contact an authorized service center, when installing your PDP Display in a location with heavy dust, high or low temperatures, high humidity, chemical substance and where it operates for 24 hours such as the airport, the train station or etc.

Failure to do so may cause a serious damage to your PDP Display.

Installing the product in an airtight place may shorten the lifetime of the product.

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**Symbols** 







Important

Note

# **Checking Parts**



Owner's Instructions



Remote Control/ AAA Batteries



Power Cord



Warranty Card/ Registration Card/ (Not available in all locations)



Stand-Base (2EA) / Screws (4EA) (PPM50M7F)





Ferrite Cores

PC Cable

### **Sold Separately**



S-Video Cable



Component Cables



Audio Cables



Video Cable



HDMI/DVI Cable



PC Audio Cable



HDMI Cable

### > Ferrite Core (Speaker Wire, Power Cord)

The ferrite cores are used to shield the cables from interference.

When connecting a cable, open the ferrite core and clip it around the cable near the plug.



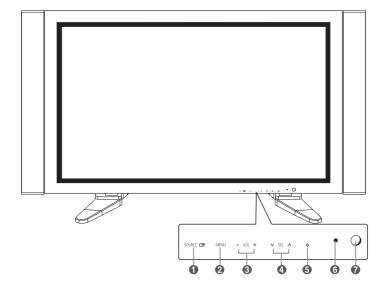
Speaker Wire



Power Cord

### **Control Panel**

### Front Panel



The product color and shape may vary depending on the model.

### **1** SOURCE(□ )

Displays a menu of all of the available input sources (AV, S-Video, Component, PC1, PC2, DVI, and HDMI).

In the on-screen menu, use this button as you would use the ENTER button on the remote control.

### MENU

Press to see the on-screen menu of your PDP Display's features.

### O - VOL +

Press to increase or decrease the volume. In the on-screen menu, use the **– VOL +** buttons as you use the **+** and **–** buttons on the remote control.

♠ ∨ SEL ∧

Control the cursor in the menu.

### 6 (Power) button

Press to turn the PDP Display on and off.

### 6 Power Indicator

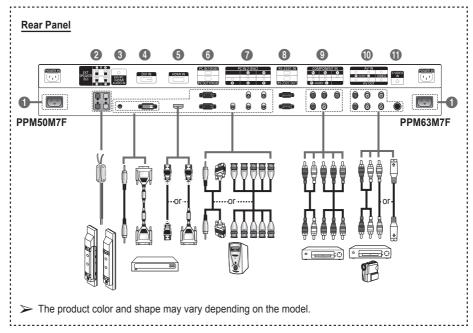
Blinks and turns off when the power is on and lights up in stand-by mode.

### Remote Control Sensor

Aim the remote control towards this spot on the PDP Display.

- You can use the SEL buttons to switch on the PDP Display when it is in standby mode depending on the model.
- The VOL + and ✓ SEL ∧
  buttons have the same function as
  the ▲/▼/◄/▶ buttons on the remote
  control.
- If the remote control no longer works or you have misplaced it, you can use the controls on the panel of the PDP Display.

### **Connection Panel**



- Whenever you connect an audio or video system to your set, ensure that all elements are switched off.
  - When connecting an external device, match the color of the connection terminal to the cable.
- POWER IN
- Connect the supplied power cord.
- **2** EXT SPEAKER  $(8\Omega)$ 
  - Connect external speakers.

### OVI/PC/HDMI AUDIO IN

Connect to the audio output jack on your PC or DVI.

- AUDIO is an audio input jack for PC1 and PC2 modes.
- A DVI IN

Connect to the video output jack for device with DVI output.

### A HDMI IN

Connect to the HDMI jack of a device with HDMI output.

- -This input can also be used as a DVI connection with separate analog audio inputs. An optional HDMI/DVI cable will be necessary to make this connection.
- -When using an optional HDMI/DVI adapter, the DVI analog audio inputs on your PDP Display allow you to receive left and right audio from your DVI device.

### 6 PC IN1/PC OUT1

- PC IN1: Connect to the video output jack on your PC.
- PC OUT1: Connect to the video input jack on external devices.

### PC IN2 (BNC)

Connect for RGB HV video signal input from the PC

"PC Mode" from this page onward means PC1/PC2 mode using RGB1(PC1) and RGB2(PC2).

### RS-232C

- IN: Used for the MDC function when connecting PC or RS-232C output of another PDP Display.
- OUT: Used for the MDC function when connecting with RS-232C input of another PDP Display.
- For further details about connections, refer to Page 10.

### COMPONENT IN

Video (Y/PB/PR) and audio (L/R) inputs for component.

### AV (VIDEO/AUDIO L/R)

- IN: Video and audio inputs for external devices, such as a camcorder or VCR.
- OUT: Outputs for external devices.

### S-VIDEO IN

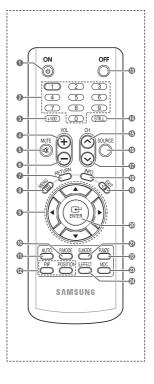
Video input for external devices with an S-Video output, such as a camcorder or VCR.

# Viewing the Remote Control

> The performance of the remote control may be affected by bright light.

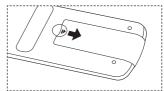
- 1 PDP display on
- 2 Direct channel selection
- 3 Not available
- 4 Volume increase
- Temporary sound switch-off
- 6 Volume decrease
- Returns to the previous menu
- 8 Menu display
- Move to the required menu option/Adjust an option value respectively
- Picture effect selection
- Auto adjustment in pc mode
- PIP functions:
  - PIP activation or deactivation (PIP)
  - Select a position of the sub-picture (POSITION)

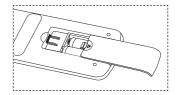
- PDP display off
- Picture still
- Next channel
- External input selection
- Previous channel
- Information display
- Exit from any display
- Confirm your choice (store or enter)
- Sound effect selection
- Picture size
- Multiple display control
- Screen effect selection (burning protection)

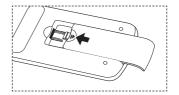


### Installing Batteries in the Remote Control

- 1 Remove the cover on the rear of the remote control by pressing the symbol () downwards and then pulling firmly to remove it.
- 2 Install two AAA size batteries.
  - Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.
    - Do not mix battery types, i.e. alkaline and manganese.
- 3 Replace the cover by aligning it with the base of the remote control and pressing it back into place.
  - Remove the batteries and store them in a cool and dry place if you won't be using the remote control for a long time. The remote control can be used up to about 23 feet from the PDP Display. (Assuming typical PDP Display usage, the batteries last for about one year.)
- ➤ If the remote control doesn't work! Check the following:
  - 1. Is the PDP Display power on?
  - 2. Are the plus and minus ends of the batteries reversed?
  - 3. Are the batteries drained?
  - 4. Is there a power cut, or is the power cord unplugged?
  - 5. Is there a special fluorescent light or a neon sign nearby?





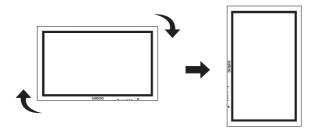


# Switching Your PDP Display On and Off

The mains lead is attached to the rear of the PDP Display.

- 1 Plug the mains lead into an appropriate socket.
  - The main voltage is indicated on the rear of the PDP Display and the frequency is 50 or 60Hz.
- 2 Press the Φ (Power) button (On/Off) on the front of the PDP Display or press the ON button on the remote control to switch the PDP Display on.
- 3 To switch the PDP Display off, press the Φ (Power) button (On/Off) on the front of the PDP Display or press the **OFF** button on the remote control.

# Installing the Display Vertically



 Samsung shall not be liable for damages caused by installing the product at the different direction from the figure below.

You can install the PDP Display vertically. In this case, the fan automatically works. If you wish to stop the fan, position the PDP Display horizontally and then set **Fan** to **Off** in the **Function** menu.

Please use the wall attachment panel exclusively when installing vertically. And you have to put the bottom of the PDP Display with menu buttons on the left when viewed from front.

# Before Using the Video Wall and the Multiple Display Control function

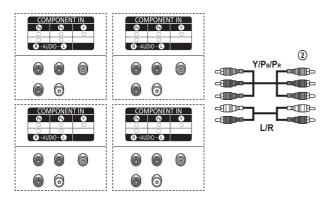
- 1 Please create ID for each PDP Display before installing them close together. It may be difficult to create IDs when operating the remote control for PDPs that are installed close to each other.
- 2 For details about Video Wall configuration and operation, refer to "Setting the Multiple Screen" on page 25.

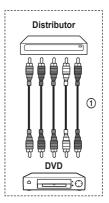
# Example for 2x2 Video Wall function



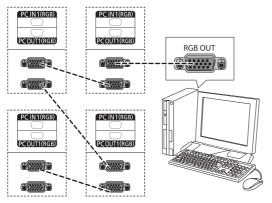
### Example for 2x2 Video Wall connections

### Rear of the PDP Display





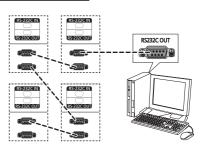
### Rear of the PDP Display



- ① Connect the Component IN port of the distributor and the Component OUT port of the device that supports the Component interface such as a DVD player using the Component video and audio cables.
- ② Connect the Component IN port on the rear panel of each PDP and the Component OUT port of the distributor using the Component video and audio cables. (A distributor has multiple Component OUT ports.)

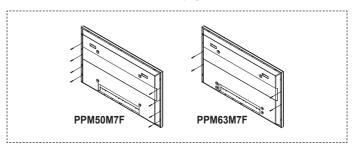
### **Example for Multiple Display Control connections**

- You can connect a Composite (Video) without a distributor as you would connect a PC.
  - Select ID input on the menu. Use the numeric buttons to enter the ID for PDP Display adjustment. You can operate the remote control only for the PDP Display that has been selected.
  - For details about Multiple Display Control, refer to "Setting the MDC (Multiple Display Control)" on page 24.

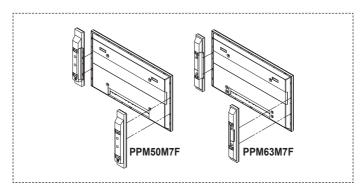


# **Connecting Speakers**

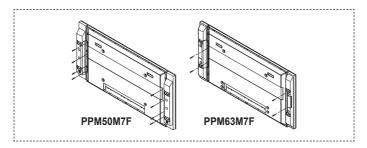
- Speakers are optional. You have to purchase the speakers additionally.
- 1 Remove the screws on the rear of the PDP Display.



2 Hang the two "T" shaped hangers on the square holes on the rear of the PDP Display.



3 Tighten the PDP Display and the speaker bracket using the screws removed from the PDP Display.



When moving your PDP Display, do NOT hold the speaker connected to your PDP Display. It may damage the bracket clamping the speaker and your PDP Display together and result in a drop of your PDP Display and a risk of personal damage and injury.

# Viewing the Menus

- Press the MENU button.
   The main menu is displayed on the screen.
   Its left side has five icons: Picture, Sound, Function, Setup, and Input.
- 2 Press the ▲ or ▼ button to select one of the icons. Press the ENTER button to access the icon's sub-menu.
- 3 Press the ▲ or ▼ button to move to items in the menu. Press the ENTER button to enter items in the menu.
- 4 Press the ▲/▼/◄/▶ button to change the selected items. Press the RETURN button to return to the previous menu.
- 5 Press the EXIT button to exit from the menu.

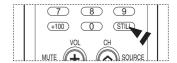




# **Freezing the Current Picture**

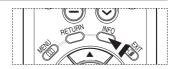
You can freeze the picture when watching a moving picture simply by pressing the "STILL" button. To return to normal viewing, press it again.

➤ In PIP mode, Still function will be applied to the main and sub picture at the same time.



# **Displaying the Setting Information**

You can view the setting status you select by pressing the INFO button on the remote control.





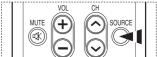
# Viewing an External Signal Sources

You can switch between viewing signals from connected equipment, such as a VCR, DVD, Set-Top Box, and the PDP Display source.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Input, then press the ENTER button
- 3 Press the ENTER button again to select Source List.
- 4 Press the ▲ or ▼ button to select the signal source, then press the ENTER button.
  - Available signal sources: AV, S-Video, Component, PC1, PC2, DVI, HDMI
  - > Only the connected devices can be selected.









- > You can select these options simply by pressing the **SOURCE** button on the remote control.
- Press the INFO button on the remote control to see the current input source.

# **Editing Device Names**

You can give a name to the external source.

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Input, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Edit Name, then press the ENTER button.
- 4 Press the ▲ or ▼ button to select the external source to be edited, then press the ENTER button.
- 5 Select the required device by pressing ▲ or ▼, then press the ENTER button.

Available device names: VCR, DVD, D-VHS, Cable STB, HD STB, Satellite STB, AV Receiver, DVD Receiver, Game, Camcorder, DVD Combo, DHR (DVD HDD Recorder), PC

6 Press the EXIT button to exit.





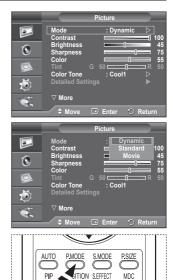
# **Changing the Picture Standard**

You can select the type of picture which best corresponds to your viewing requirements.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ENTER button to select Picture.
- 3 Press the ENTER button again to select Mode.
- 4 Select the required mode by pressing the ▲ or ▼ button, then press the ENTER button.

Available modes: Dvnamic. Standard. Movie

- The settings values may vary depending on the input source. (ex. Video, Component, PC, or HDMI)
- 5 Press the EXIT button to exit.
- Choose Dynamic for viewing the PDP Display during the day or when there is bright light in the room.
  - Choose Standard for general PDP Display watching mode
  - ◆ Choose **Movie** when viewing the movie.
- > You can select these options simply by pressing the **P.MODE** button on the remote control.



# **Customizing the Picture Settings**

Your PDP Display has several setting options that allow you to control the picture quality.

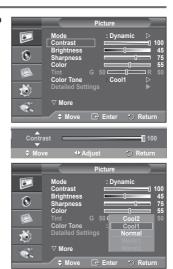
- 1 Press the **MENU** button to display the menu.
- 2 Press the ENTER button to select Picture.
- 3 Press the ENTER button again to select Mode.
- 4 Select the required mode by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available modes: Dynamic, Standard, Movie
- 5 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
- 6 When you are satisfied with your setting, press the ENTER button.
- 7 Press the EXIT button to exit.
- ◆ Contrast Brightness Sharpness Color Tint
  - In AV, S-Video modes of the PAL system, you cannot use the Tint function.

Contrast – Brightness – Color Tone : PC Mode
Press the ◀ or ▶ button until you reach the optimal setting.

- ◆ Color Tone: Cool2/Cool1/Normal/Warm1/Warm2
   ➤ When the picture mode is set to Dynamic or Standard, Warm1 and Warm2 cannot be selected.
- ♦ Reset: Cancel/OK

Select **OK**. You can return to the factory defaults picture settings.

The reset function is set for each picture mode and color tone.



# **Configuring Detailed Settings on the Picture**

### You can set detail picture settings.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ENTER button to select Picture
- 3 Press the ▲ or ▼ button to select Detailed Settings, then press the ENTER button.
- Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.

Available options: Black Adjust, Dynamic Contrast, Gamma, White Balance, My Color Control, Edge Enhancement, Color Space, xvYCC.

- 5 When you are satisfied with your setting, press the ENTER button.
- 6 Press the EXIT button to exit.
- When the picture mode is set to Movie or Standard, Detailed Settings can be selected.
- ➢ If DNIe is Off or Demo, the Detailed Settings cannot be selected when the Picture mode is in Standard mode.
- ◆ Black Adjust: Off/Low/Medium/High

You can directly select the black level on the screen to adjust the screen depth.

◆ Dynamic Contrast: Off/Low/Medium/High

You can adjust the screen contrast so that the optimal contrast is provided.

♦ Gamma: -3 ~ +3

You can adjust the middle brightness of pictures.

Press the ◀ or ▶ button until you reach the optimal setting.

♦ White Balance: R-Offset/G-Offset/B-Offset/R-Gain/G-Gain/B-Gain/Reset

You can adjust the color temperature for more natural picture colors.

### R-Offset/G-Offset/B-Offset/R-Gain/G-Gain/B-Gain:

Changing the adjustment value will refresh the adjusted screen.

Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.

Press the ◀ or ▶ button until you reach the optimal setting.

**Reset**: The previously adjusted white balance will be reset to the factory defaults.

♠ My Color Control: Pink/Green/Blue/White/Reset

This setting can be adjusted to suit your personal preferences.

Pink/Green/Blue/White: Changing the adjustment value will refresh the adjusted screen.

Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.

Press the ◀ or ▶ button until you reach the optimal setting.

When running the My Color Control feature, the current picture is captured as a still image before being displayed on the screen.

Reset: The previously adjusted colors will be reset to the factory defaults.

◆ Edge Enhancement: Off/On

You can emphasize object boundaries.

◆ Color Space: Auto/Wide

You can set the color reproduction space for the input signal to **Auto** or **Wide**.

♦ xvYCC: Off/On

Setting the xvYCC mode to On increases detail and color space when watching movies from an external device (ie. DVD player) connected to the HDMI or Component IN jacks. You must set the Picture Mode to Movie to enjoy this feature.

- The xvYCC function works only in Component or HDMI mode.
- > If xvYCC function is active, PIP cannot be selected.



♦ Move ☐ Enter

# Selecting the Picture Size

You can select the picture size which best corresponds to your viewing requirements.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ENTER button to select Picture.
- 3 Press the ▲ or ▼ button to select Size, then press the **ENTER** button.
- Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.

Available options: 16: 9. Wide Zoom, Zoom, 4: 3. Just Scan

- ◆ 16:9: Sets the picture to 16:9 wide mode.
- ◆ Wide Zoom: Magnify the size of the picture more than 4:3. Move the screen up/down using the ▲ or ▼ button after selecting the 

  by pressing the 

  or ENTER
- ◆ Zoom: Magnify the size of the picture vertically on screen.
- ◆ 4:3: Sets the picture to 4:3 normal mode.
- ◆ Just Scan: Displays the input scenes as they are without any cutoff when HDMI 720p, 1080i, 1080p signals are input.
- > With the HDMI Just Scan picture size, depending on the AV devices, the screen may be cut off or a specific appears on the screen
- PIP POSITION S,EFFECT

- Press the **EXIT** button to exit.
  - > You can change the picture size simply by pressing the **P.SIZE** button on the remote control.
  - > Depending on the input source, the picture size options may vary.
  - The items available may differ depending on the selected mode.
  - PC and DVI modes, only 16:9, 4:3 modes can be selected.

### Positioning and Sizing the screen using Zoom

- Resizing the screen using the **Zoom** enables the positioning and sizing of the screen to up/down direction using the ▲ or ▼ button as well as the screen size.
- Move the screen up/down using the ▲ or ▼ button after selecting the 🗐 by pressing the ◀ or ▶
- Resize the screen vertically using the ▲ or ▼ button after selecting the 🃦 by pressing the ◀ or ▶







# Digital NR / Active Color / DNIe / Movie Plus

- 1 Press the **MENU** button to display the menu.
- 2 Press the ENTER button to select Picture.
- 3 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.

Available options: Digital NR, Active Color, DNIe, Movie Plus

- When you are satisfied with your setting, press the ENTER button.
- 5 Press the EXIT button to exit.

### Digital NR: Off/Low/Medium/High/Auto

If the signal received by the PDP Display is weak, you can activate this feature to reduce any static and ghosting that may appear on the screen.

### ◆ Active Color: Off/On

If you turn on this option, the colors of the sky and grass will be stronger and clearer for a more vivid on-screen picture.

- > This function is not available in **PC** mode.
- > This function is available in **Dynamic** mode.

### ◆ DNIe: Off/Demo/On

This PDP Display includes the DNIe function so as to provide a high visual quality. If you set DNIe to on, you can view the screen with the DNIe feature activated. If you set the DNIe to Demo, you can view the applied DNIe and normal pictures on the screen, for demonstration purposes. Using this function, you can view the difference in the visual quality.

> DNIe™ (Digital Natural Image engine) DNIe™

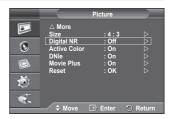
This feature brings you more detailed image with 3D noise reduction, detail enhancement, contrast enhancement and white enhancement. New image compensation Algorithm gives brighter, clearer, more detailed image to you. DNIe<sup>TM</sup> technology will fit every signal into your

- This function is not available in **PC** mode.
- > When the picture mode is set to **Movie**, **DNIe** cannot be selected.

### ♦ Movie Plus: Off/On

You can view more natural skin and clear text even in fast moving scenes.

- This function is not supported in the Wide Zoom, Zoom and Just Scan mode.
- ➤ In Movie Plus, HDMI (1080p), PC, and DVI modes are deactivated.



### **Sound Features**

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Sound, then press the ENTER button.
- 3 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: Mode, Equalizer, SRS TS XT, Auto Volume, Internal Mute, Sound Select, Reset
- When you are satisfied with your setting, press the ENTER button
- 5 Press the EXIT button to exit.



### ♦ Mode: Standard/Music/Movie/Speech/Custom

You can select the type of special sound effect to be used when watching a given broadcast.

- Choose Standard for the PDP Display standard factory settings.
  - Choose Music when watching the music videos or concerts.
  - Choose Movie when watching movies.
  - Choose Speech when watching a show that is mostly dialog(i.e., news).
  - Choose Custom to recall your personalized settings.
- > You can select these options simply by pressing the **S.MODE** button on the remote control.
- Equalizer: Balance/100Hz/300Hz/1kHz/3kHz/10kHz
   The PDP Display has several settings which allow you to control the sound quality.
  - R/L Sound Balance Adjustment: To adjust the sound balance of the R/L speakers.
    - Bandwidth Adjustment(100Hz, 300Hz, 1kHz, 3kHz, 10kHz): To adjust the level of different bandwidth frequencies.
  - If you make any changes to these settings, the sound standard is automatically switched to **Custom**.

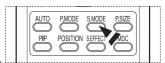
### SRS TS XT: Off/On

TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal PDP Display speakers. It is fully compatible with all multichannel formats.

➤ TruSurround XT, SRS and (●) Symbol are trademarks of SRS Labs, Inc.
TruSurround XT technology is incorporated under license from SRS Labs, Inc.

### < If Game Mode is On >









### ◆ Auto Volume: Off/On

Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

### ◆ Internal Mute: Off/On

If you want to hear the sound through separate speakers, cancel the internal amplifier.

The VOL +, VOL -, S.MODE, and MUTE buttons do not operate when the Internal Mute is set to On.

### Sound Select: Main/Sub

When the PIP feature is activated, you can listen to the sound of the sub (PIP) picture.

- Main: Used to listen to the sound of the main picture.
- **Sub**: Used to listen to the sound of the sub picture.

### Reset

If **Game Mode** is **On** (refer to page 27), the Reset Sound function is activated. Selecting the **Reset** function after setting the equalizer resets the equalizer setting to the factory defaults.

### Time Features

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Time, then press the ENTER button.
- 4 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.

Available options: Clock Set, Sleep Timer, Timer1, Timer2, Timer3

- 5 When you are satisfied with your setting, press the ENTER button.
- 6 Press the **EXIT** button to exit

### Clock Set

You can set the PDP Display clock so that the current time is displayed when pressing the **INFO** button on the remote control. You must also set the time if you wish to use the automatic on or off timers.

 Press the ◀ or ▶ button to select Month, Day, Year, Hour, or Minute

Set these by pressing the ▲ or ▼ button.

- > You can set the Month, Day, Year, Hour, and Minute directly by pressing the numeric buttons on the remote control.
- > In the event of a power interruption or the set being turned off at the supply, the settings for the Clock will be lost.

### ◆ Sleep Timer

You can select a time period of between 30 and 180 minutes after which the PDP Display automatically switches to standby mode.

Select the preset time interval (Off, 30, 60, 90, 120, 150, 180) for staying on by pressing the
 ▲ or ▼ button.

### Timer1 / Timer2 / Timer3

You can set the On/Off timers so that the PDP Display will switch on or off automatically at the time you select.

- You must set the clock first.

Press the ▲ or ▼ button to adjust to the setting satisfied.

On Time : Select hour, minute, and **No/Yes**. (To activate timer with the setting satisfied, set to **Yes**.)

**Off Time**: Select hour, minute, and **No/Yes**. (To activate timer with the setting satisfied, set to **Yes**.)

Repeat : Select Once, Everyday, Mon - Fri, Mon - Sat, or Sat - Sun.

**Volume**: Select the required volume level. **Source**: Select the required external device.

> You can set the hour, and minute directly by pressing the number buttons on the remote control.

### Auto Power Off

When you set the timer "On", the PDP Display will eventually turn off, if no controls are operated for 3 hours after the PDP Display was turned on by timer. This function is only available in timer "On" mode and prevents overheating, which may occur if a PDP Display is on for too long time.





# Language / Blue Screen / Melody / Energy Saving / HDMI Black Level

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
- When you are satisfied with your setting, press the ENTER button
- 5 Press the EXIT button to exit.

### ◆ Language

It is variable depending on the model. When you start using the PDP Display for the first time, you must select the language which will be used for displaying menus and indications.

### ♦ Blue Screen: Off/On

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the **Blue Screen** to **Off**.

### ♦ Melody: Off/Low/Medium/High

The PDP Display power on/off melody sound can be adjusted.

### ◆ Energy Saving: Off/Low/Medium/High

This feature adjusts the screen brightness depending on the surrounding lighting conditions.

- Off: Switches off the Energy Saving mode.
- Low: Operates in standard mode regardless of the surrounding illumination.
- **Medium**: Enters medium power saving mode regardless of the surrounding illumination.
- High: Enters maximum power saving mode regardless of the surrounding illumination.

### ♦ HDMI Black Level: Normal/Low

Using this function, you can adjust the image quality when the screen burn (appearance of black level, low contrast, low color, etc.) is encountered by the HDMI input for RGB limited range (16 to 235).

This function is active only when the external input connects to HDMI(RGB signals).



# **Setting the Panel Button Lock**

This feature allows you to lock the PDP Display panel buttons so that it cannot be operated via the PDP Display panel. It can, however, still be operated via the remote control. Only remote control can release the panel lock setting, so keep the remote control away from unauthorized users.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ENTER button again to select Safety Lock.
- 4 Press the ENTER button again to select Key Lock.
- 5 Select Off or On by pressing the ▲ or ▼ button, then press the ENTER button.
- 6 Press the EXIT button to exit.





# **Setting the Remote Control Button Lock**

This feature allows you to lock the remote control so that it cannot be operated via the remote control. It can, however, still be operated via the PDP Display Panel buttons.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ENTER button again to select Safety Lock.
- 4 Press the ▲ or ▼ button to select IR Lock, then press the ENTER button.
- 5 Press the EXIT button to exit.
- When IR Lock is set to On, you will not be able to use the remote control even if the remote control button is pressed. To cancel the Remote Control Button Lock, press "0000" using the numeric buttons on the remote control then, IR Lock: Off is display.
- If you press the remote control buttons too quickly, the inputs may not be recognized. Press the buttons at an interval of about 2 seconds.







# **Setting Up Your Personal ID Number**

This feature sets viewing restrictions and prevents unauthorized access to your PDP Display through the PIN (Personal Identification Number), which is a 4 digit number.

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ENTER button again to select Safety Lock.
- 4 Press the ▲ or ▼ button to select Change PIN, then press the ENTER button.
- 5 Press the number buttons to enter your current 4-digit pin number.
  - The default pin number for a new PDP Display set is "0000".
- **6** Press the numeric buttons to enter your new 4-digit pin number. Re-enter your new pin number to confirm.
- 7 Press the EXIT button to exit.
- ➤ If you forget the pin number, press the remote control buttons in the following sequence, which resets the pin to 0-0-0-0: MUTE, 1, 8, 6.





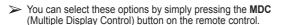




# **Setting the MDC (Multiple Display Control)**

This function enables you to easily control the connected PDP Displays on the PC by specifying IDs to connected PDP Displays.

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Multi Control, then press the ENTER button.
- Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: ID Setup(00~99), ID Input
- 5 When you are satisfied with your setting, press the ENTER button
  - > Enter ID input number by using the numeric buttons.
  - > Select the ID setup number by using the numeric buttons.
- Press the EXIT button to exit.
- ➤ To operate the multi control function, PDP1 and PDP2 should be set in the ID Setup mode. When entering the ID Input number of PDP1 while the PDP Display is set in the ID Input mode, only PDP1 is switched to the Menu screen and you can operate the remote control. At this time, PDP2 doesn't operate with the remote control and displays the standby mode of ID Input.
- > For further details, refer to the MDC program guide.
- > You can download the MDC program from the "www.samsung.com" download center.

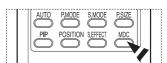












# **Setting the Multiple Screen**

You can get various display effects with many PDPs.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Video Wall, then press the ENTER button.
- 4 Press the ENTER button again.
- Fress the ▲ or ▼ button to select On, then press the ENTER button.
- 6 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.

Available options: Format(Full/Natural), Screen Divider

### Format:

**Full:** This option displays divided images on multiple PDP Displays without missing parts as if only the viewable part of the separate PDP Displays were simply part of a large single PDP Display.

**Natural:** This option displays divided images on multiple PDP Displays as if the separate PDP Displays were simply part of a large single PDP Display. Therefore there are missing parts on the edge of the PDP Displays.

- ♦ Screen Divider: 2x2, 3x3, 4x4, 5x1, or 1x5
- 7 Press the EXIT button to exit.
- The PIP function and Picture Size do not work during the Video Wall operation.









# Selecting the Fan

Fans inside the PDP Display are used to lower the temperature of the tops and the front of the PDP Display. To reduce the noise of the fan, you may stop the fan by setting the Fan to "Off". The temperature of the top and the front of the PDP Display may increase when you watch the PDP Display for a long period of time while the fan is stopped, but the PDP Display will operate normally.

Function

Safety Lock
Mutil Control
Video Wall

Fan : Off

Move 

Function

Function

Fan

Return

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Function, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Fan, then press the ENTER button.
- 4 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** button.
- 5 Press the EXIT button to exit.
- > If your PDP Display is displayed vertically, the fan automatically works.
- The message **Check Fan** is displayed if there is a fan problem.
- > Please use the fan when the temperature is over 35 degrees.

# **Using the Game Mode**

When connecting to a game console such as PlayStation<sup>TM</sup> or Xbox<sup>TM</sup>, you can enjoy a more realistic gaming experience by selecting game menu.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Game Mode, then press the ENTER button.
- 4 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** button.
- 5 Press the EXIT button to exit.

### > Restrictions on Game mode (Caution)

- To disconnect the game console and connect another external device, set Game Mode to Off.
- If you display the PDP Display menu in Game Mode, the screen shakes slightly.
- The mark ( is ) appears on the screen which means that Game Mode is On with the selected source.

### > If Game Mode is On:

- Picture Mode is automatically changed to Standard and users cannot change the mode.
- Sound Mode in the Sound menu is deactivated. Adjust the sound using the equalizer.
- The Reset Sound function is activated. Selecting the Reset function after setting the equalizer resets the equalizer setting to the factory defaults.
- ➤ If the picture is poor when external device is connected to PDP Display, check if Game Mode is On. Set Game Mode to Off and connect external devices.





# Viewing the Picture in Picture (PIP)

You can display a sub picture within the main picture of external A/V devices. In this way you can PDP Display the video input from any connected devices while monitoring other video inputs.

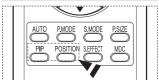
- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select PIP, then press the ENTER button.
- 4 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: PIP(Off/On), Position
- 5 When you are satisfied with your setting, press the ENTER button.
- 6 Press the EXIT button to exit.
- ♦ PIP: Off/On

You can activate or deactivate the PIP function.

Main picture	Sub picture
Component HDMI PC DVI	AV

- You can select these options simply by pressing the PIP button on the remote control.
- ◆ Position: ■/ ■/ ■/ ■
  You can select a position of the sub-picture.





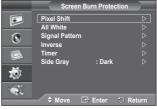
## **Screen Burn Protection**

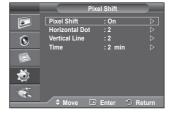
To reduce the possibility of screen burn, this unit is equipped with screen burn prevention technology. This technology enables you to set picture movement up/down (Vertical Line) and side to side (Horizontal Dot). The Time setting allows you to program the time between movement of the picture in minutes.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ENTER button again to select Screen Burn Protection.
- 4 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: Pixel Shift, All White, Signal Pattern, Inverse, Timer, Side Gray
- 5 When you are satisfied with your setting, press the ENTER button.
- 6 Press the EXIT button to exit.
- Pixel Shift: Using this function, you can minutely move pixels on the PDP in horizontal or vertical direction to minimize after image on the screen.
  - Set Pixel Shift to On by pressing the ▲ or ▼ button, then
    press the ENTER button.
  - Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: **Horizontal Dot**, **Vertical Line**, **Time**Optimum condition for pixel shift;









- The Pixel Shift value may differ depending on the monitor size (inches) and mode.
- All White: This function helps remove after images on the screen by changing the color of pixels to white. Use this function when there are remaining after images or symbols on the screen especially when you displayed a still image on the screen for a long time.
- Signal Pattern: This function helps remove after images on the screen by moving all the pixels on the PDP according to a pattern. Use this function when there are remaining after images or symbols on the screen especially when you displayed a still image on the screen for a long time.
- Inverse: This function removes after images on the screen when the PDP Display is remained on for proloned periods by converting RGB input signal into GBR. Compared to All White and Signal Pattern function, this function can reduce burn in when you watch PDP Display. Using the inverse function when you watch PDP Display can cause the color reversal on the screen. (ex. The colors in red line can be shown as the colors in green line on the screen.)
- Side Gray: When you watch PDP Display with the screen ratio of 4:3, the screen is prevented from any damage by adjusting the white balance on both extreme left and right sides.
  - Dark: When you set the screen ratio to 4:3, it darkens the left and right sides.
  - Light: When you set the screen ratio to 4:3, it brightens the left and right sides.

- ➤ To remove after images on the screen, use either **All White**, **Inverse** or **Signal Pattern** function. Although both of the three functions remove after images on the screen, **Signal Pattern** is more effective.
- The after image removal function has to be executed for a long time (approximately 1 hour) to effectively remove after images on the screen. If after image is not improved after the execution of the function, repeat the function again.
- > Press any button on the remote control to cancel this feature.

# **Setting the Screen Burn Protection Timer**

You can set the timer for Screen Burn Protection (hours, minutes). If you start the operation to erase any residual image, the operation will be performed for the set period of time and then automatically finish.

- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ENTER button again to select Screen Burn Protection
- 4 Press the ▲ or ▼ button to select Timer, then press the ENTER button.
- 5 Press the ENTER button again.
- 6 Press the ▲ or ▼ button to select On, then press the ENTER button.
- 7 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  Available options: Timer. Mode. Period. Time
- Mode: All White, Signal Pattern, Inverse
- ◆ Period: Hour(1~24)
- ♦ Time: Min.(1~30)
- 8 Press the EXIT button to exit.







# Setting up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

- 1 Right click the mouse on the Windows Desktop, then click on **Properties**.
  - The **Display Properties** will be displayed.
- 2 Click on Settings tab, then set the Display Mode with reference to the Display Modes Table. You do not need to change the colors settings.
- Click on Advanced. A new settings dialog box will be displayed.
- 4 Click on the Monitor tab, then set the Screen refresh rate with reference to the Display Modes Table. Set the Vertical Frequency and Horizontal Frequency individually if you can do so instead of setting the Screen refresh rate.
- 5 Click on OK to close the window, then Click on OK button to the Display Properties window. Automatic re-booting may commence at this moment.



# **Display Modes**

Both screen position and size will vary depending on the type of PC monitor and its resolution. The resolutions in the table are recommended. (All resolutions between the supported limits are supported)

### D-Sub/DVI Input

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	PC	DVI
640X350	31.5	70	0	0
720X400	31.5	70	0	0
640X480	31.5	60	0	0
640X480	37.9	72	0	0
640X480	37.5	75	0	0
640X480	43.3	85	0	0
800X600	37.9	60	0	0
800X600	48.1	72	0	0
800X600	46.9	75	0	0
800X600	53.7	85	0	0
1024X768	48.4	60	0	0
1024X768	56.5	70	0	0
1024x768	60.0	75	0	0
1024X768	68.7	85	0	0
1152X864	67.5	75	0	X
1280x960	60.0	60	0	0
1280x960	75.1	75	0	X
1280X1024	64.0	60	0	0
1280X1024	74.6	70	0	X
1280X1024	78.0	75	0	X
1280X1024	91.1	85	X	0
1600X1200	75.0	60	0	X
1920x1080P	67.5	60	0	0

### **HDMI** Input

Re	solution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	HDMI
IBM	640X480	31.5	60	0
480p	720x480	31.5	60	0
576p	720x576	31.3	50	0
700	1280x720	37.5	50	0
720p	1280x720	45.0	60	0
1080i	1920x1080i	28.1	50	0
10001	1920x1080i	33.7	60	0
	1920x1080P	27.0	24	0
	1920x1080P	28.1	25	0
1080p	1920x1080P	33.8	30	0
	1920x1080P	56.3	50	0
	1920x1080P	67.5	60	0

- ◆ The interlace mode is not supported.
- ◆ The set might operate abnormally if a non-standard video format is selected.
- ♦ Separate and Composite modes are supported. SOG is not supported.
- ♦ HDMI is supported for DTV signals only.

# Setting the PC

- > Preset to the **PC** mode by pressing the **SOURCE** button.
- 1 Press the **MENU** button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select PC, then press the ENTER button.
- 4 Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
  - Available options: Image Lock, Position, Auto Adjustment, Image Reset, Zoom
- 5 When you are satisfied with your setting, press the ENTER button.
- 6 Press the EXIT button to exit.

### ♦ Image Lock: Coarse/Fine

The purpose of picture quality adjustment is to remove or reduce picture noise.

If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (coarse) and Fine-tune again.

After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.

- 1 Press the ▲ or ▼ button to select Coarse or Fine, then press the ENTER button.
- 2 Press the ◀ or ▶ button to adjust the screen quality, vertical stripes may appear or the picture may be blurry. Press the ENTER button.

### Position

Adjust the PC's screen positioning if it does not fit the PDP Display screen.

- 1 Adjust the position by pressing the ▲/▼/◄/▶ button.
- 2 Press the ENTER button.

### Auto Adjustment

Auto adjustment allows the PC screen of set to self-adjust to the incoming PC video signal.

The values of fine, coarse and position are adjusted automatically.

### Image Reset

You can replace all image settings with the factory default values.

### ◆ Zoom: Zoom/Position/Reset

- Zoom: 0 - 1 - 2 - 3 - 4 - 5 - 6

Option 0 represents a normal screen.

The greater the number, the more magnified the screen.

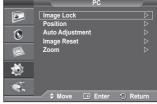
You can select the position and reset functions by selecting options 1 through 6. (If you select option **0**, the position and reset functions are not selected.)

If you have selected the Zoom function as between 1~6,

you will not be able to select the Auto Adjustment function.

- Position: You can adjust the position.
- Reset: The previously adjusted settings will be reset to the factory defaults.

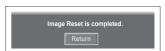












# **Setting the Home Theatre PC**

> Preset to the PC mode by pressing the SOURCE button.

You can view higher quality pictures by configuring the screen settings in PC Mode.

If you set the Home Theatre PC function to On, you can configure the Detailed Settings (when Picture Mode is set to Standard or Movie) as in PC Mode.

- 1 Press the MENU button to display the menu.
- 2 Press the ▲ or ▼ button to select Setup, then press the ENTER button.
- 3 Press the ▲ or ▼ button to select Home Theatre PC, then press the ENTER button.
- 4 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** button.

0

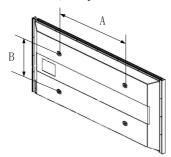
Home Theatre PC : Off

♦ Move ☐ Enter

- 5 Press the EXIT button to exit.
- > This function is available only in **PC** mode.

# Wall Mount Kit Specifications (VESA)

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.



Product Family	inch	VESA Spec. (A * B)	Standard Screw	Quantity
	23 ~ 26	200 * 100	M4	
	32 ~ 40	200 * 200	M6	
	46 ~ 52	600 * 400		
LCD-TV	57	700 * 400 (No VESA)	M8	4
	57 ~ 70	800 * 400		
	80 ~	1400 * 800		
PDP-TV/MONITOR	42 ~ 58	600 * 400		4
	70	800 * 400	M8	4
	63	No VESA	IVIO	6
	80 ~	1400 * 800		4

Continued...

- > We provided the standard dimensions for wall mount kits as shown in the table.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside of the PDP Display set.
- > For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.

  Do not use fasten the screws too strongly, this may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Our 57" and 63" models do not comply with VESA Specifications. Therefore, you should use our dedicated wall mount kit for this model.
- > Do not exceed 15 degrees tilt when mounting this PDP Display.
- Do not install your Wall Mount Kit while your PDP Display is turned on. It may result in personal injury due to electric shock.

# **Using the Stand-Base**

 Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always keep the PDP upright.



# **Troubleshooting**

Before contacting the Samsung after-sales service, perform the following simple checks. If you cannot solve the problem using the instructions below, note the model and serial number of the PDP Display and contact your local dealer.

### No sound or picture

- Check that the mains lead has been connected to a wall socket.
- Check that you have pressed the Φ (Power) button (On/Off) on the front panel or press the ON button on the remote control.
- Check the picture contrast and brightness settings.
- Check the volume
- Check if Internal Mute is set to On.

### Normal picture but no sound

- Check the volume.
- Check whether the volume MUTE button on the remote control has been pressed.

### No picture or black and white picture

Adjust the Color settings.

### Sound and picture interference

- Try to identify the electrical appliance that is affecting the PDP Display, then move it further away.
- Plug the PDP Display into a different main socket.

### Remote control malfunctions

- Replace the remote control batteries.
- Clean the upper edge of the remote control (transmission window).
- Check that the "+" and "-" ends of the batteries are inserted correctly.
- Check that the batteries are drained.

### Screen is black and power indicator light blinks steadily

- On your computer check; Power, Signal Cable.
- ◆ The PDP Display is using its power management system.
- Move the computer's mouse or press any key on the keyboard.
- On your equipment check (STB, DVD, etc); Power, Signal Cable.
- Press the Source button on the panel or remote control.
- ◆ Turn the PDP Display off and on.

### The damaged picture appears in the corner of the screen.

 If Just Scan is selected in some external devices, the damaged picture may appear in the corner of the screen. This symptom is caused by external devices, not PDP Display.

# **Specifications**

Model Name	PPM50M7F	PPM63M7F	
Screen Size (Diagonal)	50 inch	63 inch	
PC Resolution	1920 x 108	0 @ 60 Hz	
Sound (Output)	10 W +	+ 10 W	
Dimension (WxHxD)			
Body	1204.6 x 724.1 x 97.1 mm	1502.7 x 893.1 x 99.0 mm	
With stand	1204.6 x 772.5 x 362.0 mm	1502.7 x 942.3 x 341.1 mm	
Weight			
Body	43.5 kg	63.9 kg	
With stand	44.5 kg	68.9 kg	
Environmental Considerations			
Operating Temperature	10 °C to 40 °C (50 °F to 104 °F)		
Operating Humidity	10% to 80%, non-condensing		
Storage Temperature	-20 °C to 45 °C (-4 °F to 113 °F)		
Storage Humidity	5% to 95%, non-condensing		

- ➤ ♦ This device is a Class B digital apparatus.
  - ◆ Design and specifications are subject to change without prior notice.
  - ♦ For the power supply and Power Consumption, refer to the label attached to the product.



# **Correct Disposal of This Product**

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

### Contact SAMSUNG WORLD-WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre

### Comment contacter Samsung dans le monde

Si vous avez des suggestions ou des questions concernant les produits Samsung, veuillez contacter le Service Consommateurs Samsung.

### Kontakt zu Samsung

Falls Sie Fragen oder Anregungen zu Samsung-Produkten haben, wenden Sie sich bitte an den Samsung-Kundendienst.

### Contatta SAMSUNG WORLD-WIDE

Se avete commenti o domande sui prodotti Samsung, contattate il Servizio Clienti Samsung.

### Contacte SAMSUNG GLOBAL

Se tem algumas dúvidas ou comentários sobre os produtos Samsung, contacte por favor a nossa linha de apoio a clientes Samsung.

### Связывайтесь с SAMSUNG по всему миру

Если у вас есть предложения или вопросы по продуктам Samsung, связывайтесь с информационным центром Samsung.

### Kontaktiraite SAMSUNG WORLD WIDE (Samsung diliem sveta)

Ako imate pitanja ili komentara u vezi proizvoda kompanije Samsung, kontaktirajte službu za korisnike kompanije SAMSUNG.

### Contacte con SAMSUNG WORLD-WIDE

Si tiene alguna pregunta o comentario referente a nuestros productos, por favor contacte con nuestro Servicio de Atención al Cliente.

### Kontakta Samsung

Om du har några frågor eller synpunkter om Samsungs produkter, är du välkommen att kontakta Samsung Support.

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Country	Customer Care Centre 🖀	Web Site
AUSTRIA	0800-SAMSUNG(726-7864)	www.samsung.com/at
BELGIUM	0032 (0)2 201 24 18	www.samsung.com/be
	844 000 844	www.samsung.com/cz
CZECH REPUBLIC	Distributor pro Českou republiku: Samsung Zrt., česka organizační složka Vysk	očilova 4, 14000 Praha 4
DENMARK	70 70 19 70	www.samsung.com/dk
FINLAND	030-6227 515	www.samsung.com/fi
FRANCE	3260 SAMSUNG(726-7864) 08 25 08 65 65 (€ 0,15/Min)	www.samsung.com/fr
GERMANY	01805 - 121213 (€ 0,14/Min)	www.samsung.de
HUNGARY	06-80-SAMSUNG(726-7864)	www.samsung.com/hu
ITALIA	800-SAMSUNG(726-7864)	www.samsung.com/it
LUXEMBURG	0035 (0)2 261 03 710	www.samsung.com/be
NETHERLANDS	0900 20 200 88 (€ 0,10/Min)	www.samsung.com/nl
NORWAY	815-56 480	www.samsung.com/no
POLAND	0 801 801 881 022-607-93-33	www.samsung.com/pl
PORTUGAL	80 8 200 128	www.samsung.com/pt
REPUBLIC OF IRELAND	0818 717 100	www.samsung.com/ie
SLOVAKIA	0800-SAMSUNG(726-7864)	www.samsung.com/sk
SPAIN	902 10 11 30	www.samsung.com/es
SWEDEN	0771-400 200	www.samsung.com/se
SWITZERLAND	0800-SAMSUNG(726-7864)	www.samsung.com/ch
U.K	0870-SAMSUNG(726-7864)	www.samsung.com/uk
ESTONIA	800-7267	www.samsung.ee
KAZAHSTAN	8-10-800-500-55-500	www.samsung.kz
KYRGYZSTAN	00-800-500-55-500	
LATVIA	800-7267	www.samsung.com/lv
LITHUANIA	8-800-77777	www.samsung.lt
RUSSIA	8-800-555-55-55	www.samsung.ru
UKRAINE	8-800-502-0000	www.samsung.ua
UZBEKISTAN	8-800-120-0-400	www.samsung.uz

